IN THE CLAIMS:

Please amend the claims as follows:

1. (Original) An optical apparatus, the optical apparatus filtering a plurality of multiplexed channels having a first adjacent channel spacing, the plurality of multiplexed channels including at least a first subplurality of multiplexed channels and a second subplurality of multiplexed channels, the first subplurality of multiplexed channels having a second adjacent channel spacing greater than the first adjacent channel spacing, the second subplurality of multiplexed channels having a third adjacent channel spacing greater than the first adjacent channel spacing, the optical apparatus comprising:

a first set of one or more thin film filters, each thin film filter of the first set of one or more thin film filters having no less than a first transmitted dispersion magnitude and having no more than a first reflected dispersion magnitude, wherein the first set of one or more thin film filters split the first subplurality of multiplexed channels from the plurality of multiplexed channels; and

a second set of one or more thin film filters, each thin film filter of the second set of one or more thin film filters having no more than a second transmitted dispersion magnitude and having no less than a second reflected dispersion magnitude, wherein the second set of one or more thin film filters split the second subplurality of multiplexed channels from the plurality of multiplexed channels,

wherein the first transmitted dispersion magnitude exceeds the second transmitted dispersion magnitude.

2. (Orginal) The optical apparatus of claim 1, wherein the first transmitted dispersion magnitude, the first reflected dispersion magnitude, the second transmitted dispersion magnitude, and the second reflected dispersion magnitude are worst case magnitudes associated with one or more passbands.

3. (Original) The optical apparatus of claim 1, wherein the second adjacent channel spacing and the third adjacent channel spacing are equal.

4. (Original) The optical apparatus of claim 1, wherein the second adjacent channel spacing and the third adjacent channel spacing are different.

5. (Original) The optical apparatus of claim 1, wherein the first set of one or more thin film filters is arranged before the second set of one or more thin film filters.

6. (Currently Amended) The optical apparatus of claim 1, further comprising:

an interleaver splitting a plurality of preinterleaver multiplexed channels into at least the <u>first</u> plurality of multiplexed channels and a second plurality of multiplexed channels.

7. (Original) The optical apparatus of claim 6, wherein the plurality of preinterleaver multiplexed channels has a fourth adjacent channel spacing less than the first adjacent channel spacing.

8. (Original) A method of filtering a plurality of multiplexed channels having a first adjacent channel spacing, the plurality of multiplexed channels including at least a first subplurality of multiplexed channels and a second subplurality of multiplexed channels, the first subplurality of multiplexed channels having a second adjacent channel spacing greater than the first adjacent channel spacing, the second subplurality of multiplexed channels having a third adjacent channel spacing greater than the first adjacent channel spacing, the method comprising:

splitting the first subplurality of multiplexed channels from the plurality of multiplexed channels with a first set of one or more thin film filters, each thin film filter of the first set of one or more thin film filters having no less than a first transmitted dispersion magnitude and having no more than a first reflected dispersion magnitude; and

splitting the second subplurality of multiplexed channels from the plurality of multiplexed channels with a second set of one or more thin film filters, each thin film filter of the second set of one or more thin film filters having no more than a second transmitted dispersion magnitude and having no less than a second reflected dispersion magnitude,

wherein the first transmitted dispersion magnitude exceeds the second transmitted dispersion magnitude.

9. (Original) The method of claim 8, wherein the first transmitted dispersion magnitude, the first reflected dispersion magnitude, the second transmitted dispersion magnitude, and the second reflected dispersion magnitude are worst case magnitudes associated with one or more passbands.

10. (Original) The method of claim 8, wherein the second adjacent channel spacing and the third adjacent channel spacing are equal.

11. (Original) The method of claim 8, wherein the second adjacent channel spacing and the third adjacent channel spacing are different.

12. (Original) The method of claim 8, wherein splitting the first subplurality of multiplexed channels from the plurality of multiplexed channels precedes splitting the second subplurality of multiplexed channels from the plurality of multiplexed channels.

13. (Original) The method of claim 8, further comprising:

splitting a plurality of preinterleaver multiplexed channels into at least the plurality of multiplexed channels and a second plurality of multiplexed channels.

14. (Original) The method of claim 13, wherein the plurality of preinterleaver multiplexed channels has a fourth adjacent channel spacing less than the first adjacent channel spacing.

15. (Currently Amended) A method of filtering a plurality of multiplexed channels having a first adjacent channel spacing, the plurality of multiplexed channels including at least a first subplurality of multiplexed channels and a second subplurality of multiplexed channels, the first subplurality of multiplexed channels having a second adjacent channel spacing greater than the

first adjacent channel spacing, the second subplurality of multiplexed channels having a third adjacent channel spacing greater than the first adjacent channel spacing, the method comprising:

splitting the first subplurality of multiplexed channels from the plurality of multiplexed channels with [[a]] <u>the</u> first set of one or more thin film filters, such that after splitting, each of the first subplurality of multiplexed channels has no more than a first dispersion magnitude, the first dispersion magnitude being substantially attributable to a first transmitted dispersion magnitude of a first set of one or more thin film filters; and

splitting the second subplurality of multiplexed channels from the plurality of multiplexed channels with [[a]] <u>the</u> second set of one or more thin film filters, such that after splitting, each of the second subplurality of multiplexed channels has no more than a second dispersion magnitude, the second dispersion magnitude being substantially attributable to a first reflected dispersion magnitude of [[a]] <u>the</u> first set of one or more thin film filters and a second transmitted dispersion magnitude of a second set of one or more thin film filters<u>, wherein the first transmitted dispersion magnitude exceeds the second transmitted dispersion magnitude</u>.

16. (Cancelled)

17. (Original) The method of claim 15, wherein the first dispersion magnitude, the second dispersion magnitude, the first transmitted dispersion magnitude, the first reflected dispersion magnitude, and the second transmitted dispersion magnitude are worst case magnitudes associated with one or more passbands.

18. (Original) The method of claim 15, wherein the second adjacent channel spacing and the third adjacent channel spacing are equal.

19. (Original) The method of claim 15, wherein the second adjacent channel spacing and the third adjacent channel spacing are different.

20. (Original) The method of claim 15, wherein splitting the first subplurality of multiplexed channels from the plurality of multiplexed channels precedes splitting the second subplurality of multiplexed channels from the plurality of multiplexed channels.

21. (Currently Amended) A method of filtering a plurality of multiplexed channels having a first adjacent channel spacing, the plurality of multiplexed channels including at least a first subplurality of multiplexed channels and a second subplurality of multiplexed channels, the first subplurality of multiplexed channels having a second adjacent channel spacing greater than the first adjacent channel spacing, the second subplurality of multiplexed channels having a third adjacent channel spacing greater than the first adjacent channel spacing, the method comprising:

splitting a plurality of preinterleaver multiplexed channels into at least the plurality of multiplexed channels and a second plurality of multiplexed channels;

splitting the first subplurality of multiplexed channels from the plurality of multiplexed channels with a first set of one or more thin film filters, such that after splitting, each of the first subplurality of multiplexed channels has ~~no more than~~ a first dispersion magnitude, the first dispersion magnitude being substantially attributable to an interleaver dispersion magnitude and a first transmitted dispersion magnitude of [[a]] <u>the</u> first set of one or more thin film filters; and

splitting the second subplurality of multiplexed channels from the plurality of multiplexed channels with a second set of one or more thin film filters, such that after splitting, each of the second subplurality of multiplexed channels has ~~no more than~~ a second dispersion magnitude, the second dispersion magnitude being substantially attributable to [[an]] <u>the</u> interleaver dispersion magnitude, a first reflected dispersion magnitude of [[a]] <u>the</u> first set of one or more thin film filters, and a second transmitted dispersion magnitude of [[a]] <u>the</u> second set of one or more thin film filters.

22. (Original) The method of claim 21, wherein the interleaver dispersion magnitude, the first dispersion magnitude, the second dispersion magnitude, the first transmitted dispersion magnitude, the first reflected dispersion magnitude, and the second transmitted dispersion magnitude are worst case magnitudes associated with one or more passbands.

23. (Original) The method of claim 21, wherein the second adjacent channel spacing and the third adjacent channel spacing are equal.

24. (Original) The method of claim 21, wherein the second adjacent channel spacing and the third adjacent channel spacing are different.

25. (Original) The method of claim 21, wherein splitting the first subplurality of multiplexed channels from the plurality of multiplexed channels precedes splitting the second subplurality of multiplexed channels from the plurality of multiplexed channels.

26. (Original) The method of claim 21, wherein the plurality of preinterleaver multiplexed channels has a fourth adjacent channel spacing less than the first adjacent channel spacing.

27. (Original) An optical apparatus, the optical apparatus filtering a plurality of multiplexed channels having a first adjacent channel spacing, the plurality of multiplexed channels including at least a first subplurality of multiplexed channels and a second subplurality of multiplexed channels, the first subplurality of multiplexed channels having a second adjacent channel spacing greater than the first adjacent channel spacing, the second subplurality of multiplexed channels having a third adjacent channel spacing greater than the first adjacent channel spacing, the optical apparatus comprising:

a first set of one or more thin film filters, wherein the first set of one or more thin film filters split the first subplurality of multiplexed channels from the plurality of multiplexed channels; and

a second set of one or more thin film filters, wherein the second set of one or more thin film filters split the second subplurality of multiplexed channels from the plurality of multiplexed channels,

wherein after the first subplurality of multiplexed channels and the second subplurality of multiplexed channels are split from the plurality of multiplexed channels, a first dispersion magnitude of the first subplurality of multiplexed channels is substantially equal to a second dispersion magnitude of the second subplurality of multiplexed channels.

28. (Original) The optical apparatus of claim 27, wherein the first dispersion magnitude and the second dispersion magnitude are worst case magnitudes associated with one or more passbands.

29. (Original) The optical apparatus of claim 27, wherein the second adjacent channel spacing and the third adjacent channel spacing are equal.

30. (Original) The optical apparatus of claim 27, wherein the second adjacent channel spacing and the third adjacent channel spacing are different.

31. (Original) The optical apparatus of claim 27, wherein the first set of one or more thin film filters is arranged before the second set of one or more thin film filters.

32. (Original) The optical apparatus of claim 27, wherein the first dispersion magnitude of the first subplurality of multiplexed channels is substantially equal to the second dispersion magnitude of the second subplurality of multiplexed channels, such that the first dispersion magnitude and the second dispersion magnitude are within 1 ps/nm.

33. (Original) The optical apparatus of claim 27, wherein the first dispersion magnitude of the first subplurality of multiplexed channels is substantially equal to the second dispersion magnitude of the second subplurality of multiplexed channels, such that the first dispersion magnitude and the second dispersion magnitude are within 10 ps/nm.

34. (Original) The optical apparatus of claim 27, further comprising:

an interleaver splitting a plurality of preinterleaver multiplexed channels into at least the plurality of multiplexed channels and a second plurality of multiplexed channels.

35. (Original) The optical apparatus of claim 34, wherein the plurality of preinterleaver multiplexed channels has a fourth adjacent channel spacing less than the first adjacent channel spacing.

36. (Original) A method of filtering a plurality of multiplexed channels having a first adjacent channel spacing, the plurality of multiplexed channels including at least a first subplurality of multiplexed channels and a second subplurality of multiplexed channels, the first subplurality of multiplexed channels having a second adjacent channel spacing greater than the first adjacent channel spacing, the second subplurality of multiplexed channels having a third adjacent channel spacing greater than the first adjacent channel spacing, the method comprising:

splitting the first subplurality of multiplexed channels from the plurality of multiplexed channels with a first set of one or more thin film filters;

splitting the second subplurality of multiplexed channels from the plurality of multiplexed channels with a second set of one or more thin film filters,

wherein after the first subplurality of multiplexed channels and the second subplurality of multiplexed channels are split from the plurality of multiplexed channels, a first dispersion magnitude of the first subplurality of multiplexed channels is substantially equal to a second dispersion magnitude of the second subplurality of multiplexed channels.

37. (Original) The method of claim 36, wherein the first dispersion magnitude and the second dispersion magnitude are worst case magnitudes associated with one or more passbands.

38. (Original) The method of claim 36, wherein the second adjacent channel spacing and the third adjacent channel spacing are equal.

39. (Original) The method of claim 36, wherein the second adjacent channel spacing and the third adjacent channel spacing are different.

40. (Original) The method of claim 36, wherein splitting the first subplurality of multiplexed channels from the plurality of multiplexed channels precedes splitting the second subplurality of multiplexed channels from the plurality of multiplexed channels.

41. (Original) The method of claim 36, wherein the first dispersion magnitude of the first subplurality of multiplexed channels is substantially equal to the second dispersion magnitude of

the second subplurality of multiplexed channels, such that the first dispersion magnitude and the second dispersion magnitude are within 1 ps/nm.

42. (Original) The method of claim 36, wherein the first dispersion magnitude of the first subplurality of multiplexed channels is substantially equal to the second dispersion magnitude of the second subplurality of multiplexed channels, such that the first dispersion magnitude and the second dispersion magnitude are within 10 ps/nm.

43. (Original) The method of claim 36, further comprising:

splitting a plurality of preinterleaver multiplexed channels into at least the plurality of multiplexed channels and a second plurality of multiplexed channels.

44. (Original) The method of claim 43, wherein the plurality of preinterleaver multiplexed channels has a fourth adjacent channel spacing less than the first adjacent channel spacing.